

# Ezzat Chan Abdullah

## List of Publications by Year in descending order

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114  
papers

6,874  
citations

44042

48  
h-index

62565

80  
g-index

116  
all docs

116  
docs citations

116  
times ranked

7417  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | The use of bulk density measurements as flowability indicators. Powder Technology, 1999, 102, 151-165.  | 2.1 | 389       |
| 2  | Recent trends in the synthesis of graphene and graphene oxide based nanomaterials for removal of heavy metals – A review. Journal of Industrial and Engineering Chemistry, 2018, 66, 29-44.                       | 2.9 | 299       |
| 3  | Synthesis of magnetic biochar from agricultural waste biomass to enhancing route for waste water and polymer application: A review. Renewable and Sustainable Energy Reviews, 2017, 67, 257-276.                  | 8.2 | 292       |
| 4  | Removal of Heavy Metals from Wastewater Using Carbon Nanotubes. Separation and Purification Reviews, 2014, 43, 311-338.   | 2.8 | 240       |
| 5  | Applications of graphene and its derivatives as an adsorbent for heavy metal and dye removal: a systematic and comprehensive overview. RSC Advances, 2015, 5, 50392-50420.  | 1.7 | 240       |
| 6  | Characterization of powder flowability using measurement of angle of repose. Particuology: Science and Technology of Particles, 2006, 4, 104-107.   | 0.4 | 237       |
| 7  | A comprehensive review on magnetic carbon nanotubes and carbon nanotube-based buckypaper for removal of heavy metals and dyes. Journal of Hazardous Materials, 2021, 413, 125375.                                 | 6.5 | 223       |
| 8  | Application potential of carbon nanomaterials in water and wastewater treatment: A review. Journal of the Taiwan Institute of Chemical Engineers, 2017, 72, 116-133.  | 2.7 | 220       |
| 9  | An overview of immobilized enzyme technologies for dye and phenolic removal from wastewater. Journal of Environmental Chemical Engineering, 2019, 7, 102961.  | 3.3 | 175       |
| 10 | An overview on methods for the production of carbon nanotubes. Journal of Industrial and Engineering Chemistry, 2014, 20, 1186-1197.  | 2.9 | 160       |
| 11 | Microwave induced synthesis of magnetic biochar from agricultural biomass for removal of lead and cadmium from wastewater. Journal of Industrial and Engineering Chemistry, 2017, 45, 287-295.                    | 2.9 | 154       |
| 12 | Immobilization of cellulase enzyme on functionalized multiwall carbon nanotubes. Journal of Molecular Catalysis B: Enzymatic, 2014, 107, 124-131.   | 1.8 | 147       |
| 13 | Solid matrices for fabrication of magnetic iron oxide nanocomposites: Synthesis, properties, and application for the adsorption of heavy metal ions and dyes. Composites Part B: Engineering, 2019, 162, 538-568. | 5.9 | 145       |
| 14 | Graphene based nanomaterials for strain sensor application – a review. Journal of Environmental Chemical Engineering, 2020, 8, 103743.  | 3.3 | 136       |
| 15 | Magnetic nanoadsorbents – potential route for heavy metals removal – a review. Environmental Science and Pollution Research, 2020, 27, 24342-24356.   | 2.7 | 127       |
| 16 | An overview of functionalised carbon nanomaterial for organic pollutant removal. Journal of Industrial and Engineering Chemistry, 2018, 67, 175-186.  | 2.9 | 104       |
| 17 | Biodiesel synthesis using natural solid catalyst derived from biomass waste – A review. Journal of Industrial and Engineering Chemistry, 2020, 81, 41-60.   | 2.9 | 101       |
| 18 | Synthesis of palm oil empty fruit bunch magnetic pyrolytic char impregnating with FeCl <sub>3</sub> by microwave heating technique. Biomass and Bioenergy, 2014, 61, 265-275.                                     | 2.9 | 99        |

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|----|--|-----|-----------|
| 19 | CFD simulation of fluidized bed reactors for polyolefin production – A review. Journal of Industrial and Engineering Chemistry, 2014, 20, 3919-3946.   | 2.9 | 99        |
| 20 | Agricultural biomass-derived magnetic adsorbents: Preparation and application for heavy metals removal. Journal of the Taiwan Institute of Chemical Engineers, 2017, 78, 168-177.                                | 2.7 | 97        |
| 21 | Statistical optimization and kinetic studies on removal of Zn <sup>2+</sup> using functionalized carbon nanotubes and magnetic biochar. Journal of Environmental Chemical Engineering, 2013, 1, 486-495.         | 3.3 | 96        |
| 22 | An overview of biodiesel production using recyclable biomass and non-biomass derived magnetic catalysts. Journal of Environmental Chemical Engineering, 2019, 7, 103219.   | 3.3 | 94        |
| 23 | Characterisation of dry powders. Powder Technology, 2009, 190, 70-74.  | 2.1 | 89        |
| 24 | Synthesis of CTAB intercalated graphene and its application for the adsorption of AR265 and AO7 dyes from water. Journal of Colloid and Interface Science, 2017, 493, 51-61.                                     | 5.0 | 83        |
| 25 | Magnetic nanoparticles incorporation into different substrates for dyes and heavy metals removal – A Review. Environmental Science and Pollution Research, 2020, 27, 43526-43541.                                | 2.7 | 82        |
| 26 | A promising route of magnetic based materials for removal of cadmium and methylene blue from waste water. Journal of Environmental Chemical Engineering, 2017, 5, 1447-1455.                                     | 3.3 | 80        |
| 27 | Effects of TiO <sub>2</sub> addition on the phase, mechanical properties, and microstructure of zirconia-toughened alumina ceramic composite. Ceramics International, 2015, 41, 3961-3967.                       | 2.3 | 76        |
| 28 | Emerging pollutants and their removal using visible-light responsive photocatalysis – A comprehensive review. Journal of Environmental Chemical Engineering, 2021, 9, 106643.                                    | 3.3 | 74        |
| 29 | Rapid adsorption of toxic Pb(II) ions from aqueous solution using multiwall carbon nanotubes synthesized by microwave chemical vapor deposition technique. Journal of Environmental Sciences, 2016, 45, 143-155. | 3.2 | 72        |
| 30 | A review on the properties and applications of chitosan, cellulose and deep eutectic solvent in green chemistry. Journal of Industrial and Engineering Chemistry, 2021, 104, 362-380.                            | 2.9 | 72        |
| 31 | Magnetic palm kernel biochar potential route for phenol removal from wastewater. Environmental Science and Pollution Research, 2019, 26, 35183-35197.  | 2.7 | 70        |
| 32 | Plam oil empty fruit bunch based magnetic biochar composite comparison for synthesis by microwave-assisted and conventional heating. Journal of Analytical and Applied Pyrolysis, 2016, 120, 521-528.            | 2.6 | 69        |
| 33 | Immobilization of Peroxidase on Functionalized MWCNTs-Buckypaper/Polyvinyl alcohol Nanocomposite Membrane. Scientific Reports, 2019, 9, 2215.  | 1.6 | 68        |
| 34 | Modelling of methylene blue adsorption using peroxidase immobilized functionalized Buckypaper/polyvinyl alcohol membrane via ant colony optimization. Environmental Pollution, 2020, 259, 113940.                | 3.7 | 68        |
| 35 | Effect of process parameters for production of microporous magnetic biochar derived from agriculture waste biomass. Microporous and Mesoporous Materials, 2017, 253, 29-39.                                      | 2.2 | 67        |
| 36 | Comparative study of acid functionalization of carbon nanotube via ultrasonic and reflux mechanism. Journal of Environmental Chemical Engineering, 2018, 6, 5889-5896.   | 3.3 | 67        |

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|----|--|-----|-----------|
| 37 | Adsorption of Cu(II) and Ni(II) ions from wastewater onto bentonite and bentonite/GO composite. <i>Environmental Science and Pollution Research</i> , 2020, 27, 33270-33296.   | 2.7 | 62        |
| 38 | A new route of magnetic biochar based polyaniline composites for supercapacitor electrode materials. <i>Journal of Analytical and Applied Pyrolysis</i> , 2016, 121, 240-257.  | 2.6 | 61        |
| 39 | Fabrication of 3D binder-free graphene NiO electrode for highly stable supercapattery. <i>Scientific Reports</i> , 2020, 10, 11214.  | 1.6 | 60        |
| 40 | Modeling and optimization by particle swarm embedded neural network for adsorption of methylene blue by jicama peroxidase immobilized on buckypaper/polyvinyl alcohol membrane. <i>Environmental Research</i> , 2020, 183, 109158.     | 3.7 | 60        |
| 41 | Synthesis of polyvinyl alcohol (PVA) infiltrated MWCNTs buckypaper for strain sensing application. <i>Scientific Reports</i> , 2018, 8, 17295.   | 1.6 | 59        |
| 42 | Carbon nanomaterials based films for strain sensing application—A review. <i>Nano Structures Nano Objects</i> , 2019, 18, 100312.  | 1.9 | 59        |
| 43 | Title is missing!. <i>ScienceAsia</i> , 2007, 33, 469.   | 0.2 | 59        |
| 44 | In-situ polymerization of magnetic biochar – polypyrrole composite: A novel application in supercapacitor. <i>Biomass and Bioenergy</i> , 2017, 98, 95-111.  | 2.9 | 58        |
| 45 | Magnetic biochar derived from waste palm kernel shell for biodiesel production via sulfonation. <i>Waste Management</i> , 2020, 118, 626-636.  | 3.7 | 58        |
| 46 | Iron Oxide Nanomaterials for the Removal of Heavy Metals and Dyes From Wastewater. , 2019, , 447-472.  |     | 55        |
| 47 | Comparative kinetic study of functionalized carbon nanotubes and magnetic biochar for removal of Cd <sup>2+</sup> ions from wastewater. <i>Korean Journal of Chemical Engineering</i> , 2015, 32, 446-457.                             | 1.2 | 54        |
| 48 | Removal of dye using peroxidase-immobilized Buckypaper/polyvinyl alcohol membrane in a multi-stage filtration column via RSM and ANFIS. <i>Environmental Science and Pollution Research</i> , 2020, 27, 40121-40134.                   | 2.7 | 54        |
| 49 | A comprehensive review on micropollutants removal using carbon nanotubes-based adsorbents and membranes. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106647.   | 3.3 | 54        |
| 50 | Single-route synthesis of magnetic biochar from sugarcane bagasse by microwave-assisted pyrolysis. <i>Materials Letters</i> , 2016, 184, 315-319.  | 1.3 | 52        |
| 51 | Adsorption of heavy metal from industrial wastewater onto low-cost Malaysian kaolin clay-based adsorbent. <i>Environmental Science and Pollution Research</i> , 2020, 27, 13949-13962.   | 2.7 | 50        |
| 52 | Single stage production of carbon nanotubes using microwave technology. <i>Diamond and Related Materials</i> , 2014, 48, 52-59.  | 1.8 | 49        |
| 53 | Microwave sintering of zirconia-toughened alumina (ZTA)-TiO <sub>2</sub> -Cr <sub>2</sub> O <sub>3</sub> ceramic composite: The effects on microstructure and properties. <i>Journal of Alloys and Compounds</i> , 2017, 722, 458-466. | 2.8 | 47        |
| 54 | A Review of the Graphene Synthesis Routes and its Applications in Electrochemical Energy Storage. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2020, 45, 339-377.   | 6.8 | 47        |

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|----|---|-----|-----------|
| 55 | Removal of Methylene Blue and Orange-G from Waste Water Using Magnetic Biochar. <i>International Journal of Nanoscience</i> , 2015, 14, 1550009.  | 0.4 | 46        |
| 56 | From bamboo leaf to aerogel: Preparation of water glass as a precursor. <i>Journal of Non-Crystalline Solids</i> , 2014, 386, 76-84.  | 1.5 | 45        |
| 57 | Dodecyl sulfate chain anchored mesoporous graphene: Synthesis and application to sequester heavy metal ions from aqueous phase. <i>Chemical Engineering Journal</i> , 2016, 304, 431-439.   | 6.6 | 38        |
| 58 | Magnetic nanocomposites for sustainable water purification—a comprehensive review. <i>Environmental Science and Pollution Research</i> , 2021, 28, 19563-19588.   | 2.7 | 38        |
| 59 | Adsorption of chromium (VI) on functionalized and non-functionalized carbon nanotubes. <i>Korean Journal of Chemical Engineering</i> , 2014, 31, 1582-1591.   | 1.2 | 36        |
| 60 | Microwave assisted multiwall carbon nanotubes enhancing Cd(II) adsorption capacity in aqueous media. <i>Journal of Industrial and Engineering Chemistry</i> , 2015, 24, 24-33.  | 2.9 | 34        |
| 61 | Low cost and efficient synthesis of magnetic iron oxide/activated sericite nanocomposites for rapid removal of methylene blue and crystal violet dyes. <i>Materials Characterization</i> , 2020, 163, 110275.   | 1.9 | 33        |
| 62 | Functionalized multi-walled carbon nanotubes and hydroxyapatite nanorods reinforced with polypropylene for biomedical application. <i>Scientific Reports</i> , 2021, 11, 843.   | 1.6 | 33        |
| 63 | Novel microwave-assisted multiwall carbon nanotubes enhancing Cu (II) adsorption capacity in water. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2015, 53, 140-152.   | 2.7 | 32        |
| 64 | Microwave-assisted synthesis of multi-walled carbon nanotubes for enhanced removal of Zn(II) from wastewater. <i>Research on Chemical Intermediates</i> , 2016, 42, 3257-3281.  | 1.3 | 32        |
| 65 | A facile and green synthetic approach toward fabrication of starch-stabilized magnetite nanoparticles. <i>Chinese Chemical Letters</i> , 2017, 28, 1590-1596.   | 4.8 | 30        |
| 66 | Surface charge on chitosan/cellulose nanowhiskers composite via functionalized and untreated carbon nanotube. <i>Arabian Journal of Chemistry</i> , 2021, 14, 103022.   | 2.3 | 29        |
| 67 | Facile and green preparation of magnetite/zeolite nanocomposites for energy application in a single-step procedure. <i>Journal of Alloys and Compounds</i> , 2017, 719, 218-226.  | 2.8 | 29        |
| 68 | Insight into immobilization efficiency of Lipase enzyme as a biocatalyst on the graphene oxide for adsorption of Azo dyes from industrial wastewater effluent. <i>Journal of Molecular Liquids</i> , 2022, 354, 118849.   | 2.3 | 29        |
| 69 | Effects of Cr <sub>2</sub> O <sub>3</sub> addition on the phase, mechanical properties, and microstructure of zirconia-toughened alumina added with TiO <sub>2</sub> (ZTA+TiO <sub>2</sub> ) ceramic composite. <i>International Journal of Refractory Metals and Hard Materials</i> , 2016, 61, 40-45. | 1.7 | 27        |
| 70 | An Overview of Magnetic Material: Preparation and Adsorption Removal of Heavy Metals from Wastewater. <i>Nanotechnology in the Life Sciences</i> , 2019, , 131-159.   | 0.4 | 25        |
| 71 | Carbon and polymer-based magnetic nanocomposites for oil-spill remediation—a comprehensive review. <i>Environmental Science and Pollution Research</i> , 2021, 28, 54477-54496.   | 2.7 | 24        |
| 72 | Characterisation of bio-silica synthesised from cogon grass ( <i>Imperata cylindrica</i> ). <i>Powder Technology</i> , 2014, 254, 206-213.  | 2.1 | 23        |

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|----|---|-----|-----------|
| 73 | An improvement to the basic energy balance model for urban thermal environment analysis. Energy and Buildings, 1990, 14, 143-152.   | 3.1 | 22        |
| 74 | Synthesis of organic phase change materials by using carbon nanotubes as filler material. Nano Structures Nano Objects, 2019, 19, 100361.   | 1.9 | 22        |
| 75 | The effects of CeO <sub>2</sub> addition on the physical and microstructural properties of ZTA-TiO <sub>2</sub> ceramics composite. Journal of Alloys and Compounds, 2019, 773, 27-33.                    | 2.8 | 21        |
| 76 | Graphene/PVA buckypaper for strain sensing application. Scientific Reports, 2020, 10, 20106.  | 1.6 | 20        |
| 77 | Optimisation of NiO electrodeposition on 3D graphene electrode for electrochemical energy storage using response surface methodology. Journal of Electroanalytical Chemistry, 2021, 882, 114992.          | 1.9 | 19        |
| 78 | ADSORPTION AND KINETIC STUDY ON $\text{Sn}^{2+}$ REMOVAL USING MODIFIED CARBON NANOTUBE AND MAGNETIC BIOCHAR. International Journal of Nanoscience, 2013, 12, 1350044.                                    | 0.4 | 18        |
| 79 | Measuring powder flowability with a modified Warren Spring cohesion tester. Particuology, 2011, 9, 148-154.   | 2.0 | 17        |
| 80 | Modelling and optimization for methylene blue adsorption using graphene oxide/chitosan composites via artificial neural network-particle swarm optimization. Materials Today Chemistry, 2022, 24, 100946. | 1.7 | 17        |
| 81 | Solubility of Isoniazid in Various Organic Solvents from (301 to 313) K. Journal of Chemical & Engineering Data, 2008, 53, 1962-1964.   | 1.0 | 16        |
| 82 | Solubility of Isoniazid in Supercritical Carbon Dioxide. Journal of Chemical & Engineering Data, 2010, 55, 2306-2309.   | 1.0 | 16        |
| 83 | Facile synthesis of a binary composite from watermelon rind using response surface methodology for supercapacitor electrode material. Journal of Energy Storage, 2022, 49, 104147.                        | 3.9 | 16        |
| 84 | Electrocatalytic activity of starch/Fe <sub>3</sub> O <sub>4</sub> /zeolite bionanocomposite for oxygen reduction reaction. Arabian Journal of Chemistry, 2020, 13, 1297-1308.                            | 2.3 | 13        |
| 85 | Surface force arising from Adsorbed graphene oxide in kaolinite suspensions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 592, 124592.   | 2.3 | 12        |
| 86 | Adsorptive Removal of Phenol from Aqueous Solution by Using Carbon Nanotubes and Magnetic BioChar. NanoWorld Journal, 2017, 03, 32-37.  | 0.8 | 12        |
| 87 | Pilot study of in-line continuous flocculation water treatment plant. Journal of Environmental Chemical Engineering, 2018, 6, 7185-7191.  | 3.3 | 11        |
| 88 | Physicochemical properties of bamboo leaf aerogels synthesized via different modes of gelation. Applied Surface Science, 2014, 301, 161-172.  | 3.1 | 10        |
| 89 | Functionalized carbon nanomaterials for wastewater treatment. , 2019, , 283-311.  |     | 10        |
| 90 | Novel fabrication of functionalized graphene oxide via magnetite and 1-butyl-3-methylimidazolium tetrafluoroborate. Nano Structures Nano Objects, 2018, 16, 403-411.                                      | 1.9 | 9         |

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|-----|--|-----|-----------|
| 91  | Immobilization of Lipase Enzyme Carbon Nanotubes via Adsorption. IOP Conference Series: Materials Science and Engineering, 0, 495, 012055.   | 0.3 | 9         |
| 92  | Optimising the fabrication of 3D binder-free graphene electrode for electrochemical energy storage application. Surface and Coatings Technology, 2021, 413, 127080.  | 2.2 | 9         |
| 93  | Adsorptive Removal of Methylene Blue Using Magnetic Biochar Derived from Agricultural Waste Biomass: Equilibrium, Isotherm, Kinetic Study. International Journal of Nanoscience, 2018, 17, 1850002.        | 0.4 | 8         |
| 94  | Effect of Titania (TiO <sub>2</sub> ) Addition to Zirconia Toughened Alumina (ZTA) Phases, Hardness and Microstructure. Advanced Materials Research, 0, 1087, 293-298.                                     | 0.3 | 6         |
| 95  | Effect of Cr <sub>2</sub> O <sub>3</sub> -TiO <sub>2</sub> Addition on the Physical Properties of Zirconia Toughened Alumina. Materials Science Forum, 0, 840, 34-38.                                      | 0.3 | 6         |
| 96  | Adsorption Isotherm and Thermodynamics Studies of Zn(II) on Functionalized and Non-Functionalized Carbon Nanotubes. Advanced Science, Engineering and Medicine, 2014, 6, 974-984.                          | 0.3 | 6         |
| 97  | Encapsulation Method for CaCO <sub>3</sub> Nanoparticles. Journal of Applied Sciences, 2007, 7, 2046-2050.   | 0.1 | 6         |
| 98  | An Approach to Utilize Crust Leather Scrapes, Dumped into the Land, for the Production of Environmental Friendly Leather Composite. Engineering Journal, 2013, 17, 17-24.                                  | 0.5 | 6         |
| 99  | Single-route synthesis of binary metal oxide loaded coconut shell and watermelon rind biochar: Characterizations and cyclic voltammetry analysis. Biomass Conversion and Biorefinery, 2023, 13, 2279-2291. | 2.9 | 5         |
| 100 | Effects of ultrasound in coating nano-precipitated CaCO <sub>3</sub> with stearic acid. Asia-Pacific Journal of Chemical Engineering, 2009, 4, 807-813.  | 0.8 | 4         |
| 101 | Enhancement the Dissolution Rate and Solubility of Poorly Soluble Drugs: Review. Advanced Materials Research, 0, 701, 234-238.   | 0.3 | 4         |
| 102 | Mass Production of Carbon Nanofibers Using Microwave Technology. Journal of Nanoscience and Nanotechnology, 2015, 15, 9571-9577.   | 0.9 | 4         |
| 103 | Determination of kinetic parameters for thermal decomposition of bamboo leaf to extract bio-silica. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2016, 38, 3249-3254.          | 1.2 | 4         |
| 104 | Multiwall carbon nanotube promising route for removal of chromium from wastewater via batch column mechanism. IOP Conference Series: Materials Science and Engineering, 0, 495, 012061.                    | 0.3 | 4         |
| 105 | Characterization of crystallized struvite on wastewater treatment equipment: Prospects for crystal fertilizer production. , 0, 113, 205-212.   |     | 4         |
| 106 | Microwave Assisted Carbon Nanofibers for Removal of Zinc and Copper from Waste Water. Journal of Nanoscience and Nanotechnology, 2017, 17, 1847-1856.  | 0.9 | 3         |
| 107 | Isoniazid Active Pharmaceutical Ingredient in Nano Size Using Ultra Rapid Freezing. Nanoscience and Nanotechnology Letters, 2013, 5, 593-599.  | 0.4 | 2         |
| 108 | Bamboo Leaf Aerogel Opacified with Activated Carbon. Transactions of the Indian Ceramic Society, 2016, 75, 175-180.  | 0.4 | 2         |

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|-----|---|-----|-----------|
| 109 | Importance of Nanomaterials in Engineering Application. Engineering Materials, 2021, , 1-20.  | 0.3 | 2         |
| 110 | A SILICON GERMANIUM GRADED JUNCTIONLESS TRANSISTOR WITH LOW OFF CURRENT. International Journal of Nanoscience, 2013, 12, 1350043.   | 0.4 | 1         |
| 111 | Effect of Titania and Magnesia on the Physical Properties of Zirconia Toughened Alumina. Materials Science Forum, 0, 840, 82-86.  | 0.3 | 1         |
| 112 | Storage Conditions and Particle Size Effects on Powder Cohesion Index Using Stable Micro System. Advanced Materials Research, 0, 701, 415-419.                            | 0.3 | 0         |
| 113 | Thermal Insulative Performance of Bamboo Leaf Aerogel Opacified Using Activated Carbon Compared with Carbon Black. Advanced Materials Research, 2014, 941-944, 2482-2485. | 0.3 | 0         |
| 114 | Synthesis of magnetic biochar from Garcinia Mangostana peel using muffle furnace for adsorption of Zn <sup>2+</sup> ions from aqueous solution. , 2015, , .               |     | 0         |